Deploying Podcast Producer

Session 621

These are confidential sessions—please refrain from streaming, blogging, or taking pictures.

At the convention center, a movie will be placed here

Deploying Podcast Producer

Podcast Producer 2

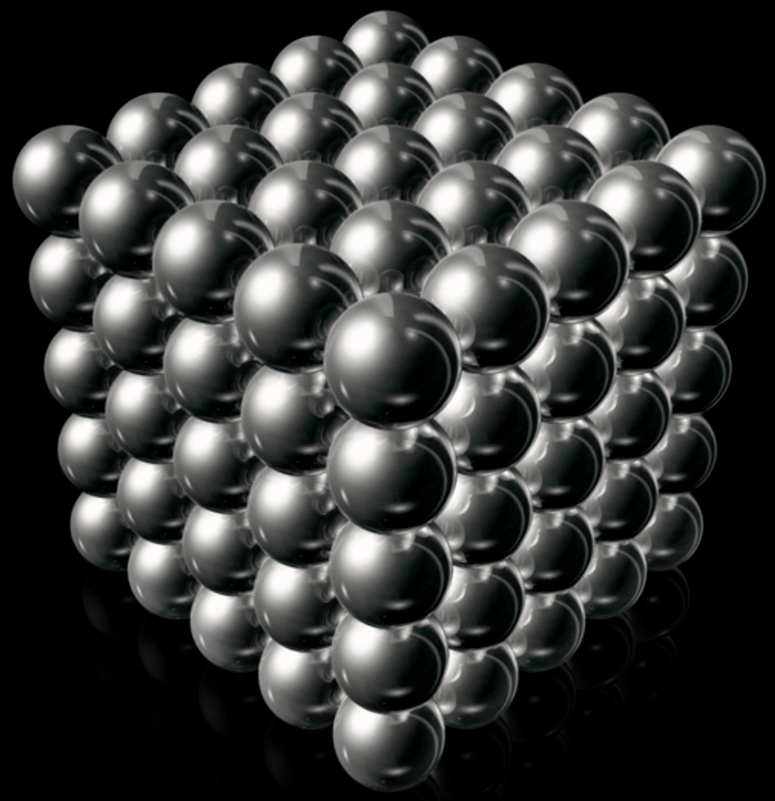
Capture

Process

Deliver

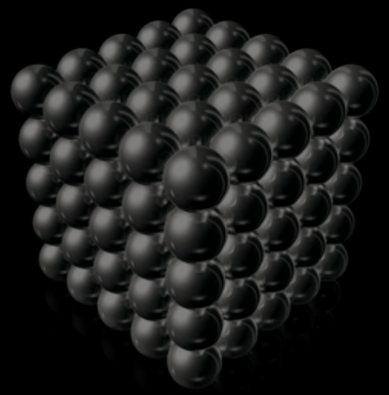
Best Practices for Deploying Podcast Producer

George Cook
Consulting Engineer



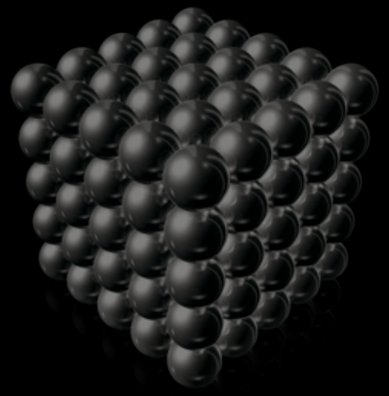
Shared File System

Shared File System



Media Processing and Encoding

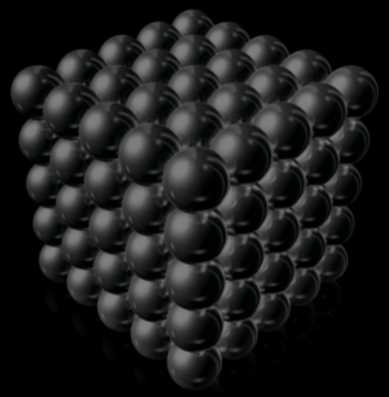
Shared File System



Media Processing
and Encoding

Content
Delivery

Shared File System



Content Delivery

Media Processing
and Encoding

You

You

Podcast Producer 1.0 Depolyments

Business

- Training
- Content review and approval
- Customer communication
  - Marketing
  - News
  - Education

Education

- Lectures
- Educational content
- Student collaboration
- Professional development
- Distance education
- Community outreach

BBC America: Postproduction NYC

MDC, ODM
OD Rep/MD Failover,
Final Cut Server, Podcast Producer
Qmaster/Telestream/
Xgrid Clustered Services

Editorial, graphics workgroup

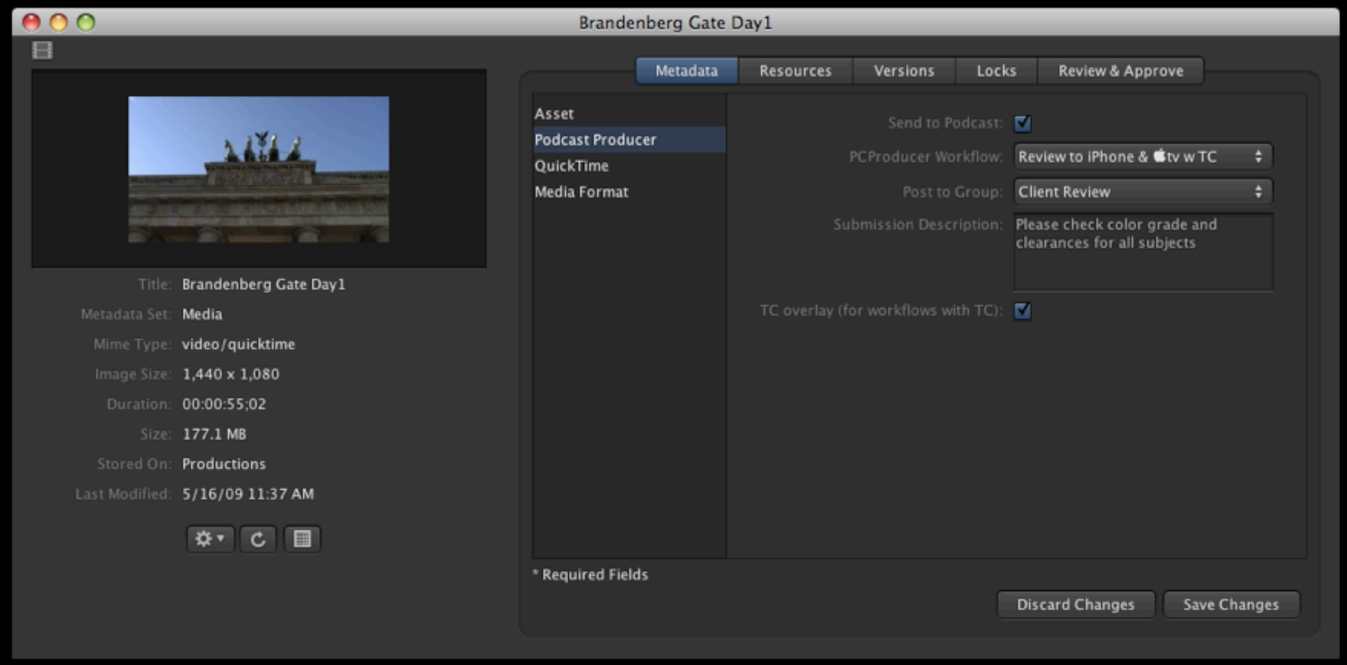
Remote HTTP progressive
download screening

Interoffice/home NTSC/PAL screening

Integration: Final Cut Server and Podcast Producer

Final Cut Server

- Run external scripts (Shell, Ruby, etc.) for submissions
- Offers ability to create dynamic workflow variables
- Option to utilize compressor first for additional transcodes/ filters (timecode overlay example)



Integration: Final Cut Server and Podcast Producer

Final Cut Server

- pcastaction submission script

```
#!/bin/sh

# environment variables

PATH=/bin:/usr/bin:/sbin:/usr/sbin export PATH
HOME=/Users/admin export HOME
PWD='/Library/Logs/Final Cut Server' export PWD

# Final Cut Server variables

fnam="$1"
desc="$2"
wrkfl="$4"
blog="$5"
newfnam=`echo "$fnam" | sed -e 's;\.mov;\.m4v;'`

# generate the xml.plist for Podcast Producer Title, Blogname and Description values using FCS passed variables

defaults write Description "$desc" /Final_Cut_Server/pcproducer/pliststopcp/"$1.plist"
defaults write Blogname "$blog" /Final_Cut_Server/pcproducer/pliststopcp/"$1.plist"
defaults write Title "$fnam" /Final_Cut_Server/pcproducer/pliststopcp/"$1.plist"

# Submit file and workflow to Podcast Producer

/usr/bin/podcast --server 10.1.17.1 --user admin --pass admin --submit --file /Final_Cut_Server/pcproducer/fileswithTC/"$newfnam" \
--workflow "$wrkfl" --metadata /Final_Cut_Server/pcproducer/pliststopcp/"$1.plist"
```

Integration: Final Cut Server and Podcast Producer

Podcast Producer

- Workflow action

```
<key>groupblog</key>
                        <dict>
                                <key>arguments</key>
                                <array>
                                        <string>groupblog</string>
                                        <string>--basedir=$$Base Directory$$</string>
                                        <string>--server_url=$$Groups Web Server URL$$</string>
                                        <string>--group=$$Blogname$$</string>
                                        <string>--username=$$Groups Administrator Username$$</string>
                                        <string>--pcast_server=$$Podcast Producer URL$$</string>
                                        <string>--otp=##Groups Administrator Username:Groups Administrator Password##</string>
                                        <string>--authorize=$$User Short Name$$</string>
                                        <string>--title=$$Title$$</string>
                                        <string>--content_file=groupblog.html</string>
                                        <string>--enclosure_description_file=appletv_publish_description_file.yaml</string>
                                        <string>--outfile</string>
                                </array>
                                <key>command</key>
                                <string>/usr/bin/pcastaction</string>
                                <key>dependsOnTasks</key>
                                <array>
                                        <string>template_groupblog</string>
                                </array>
                        </dict>
```

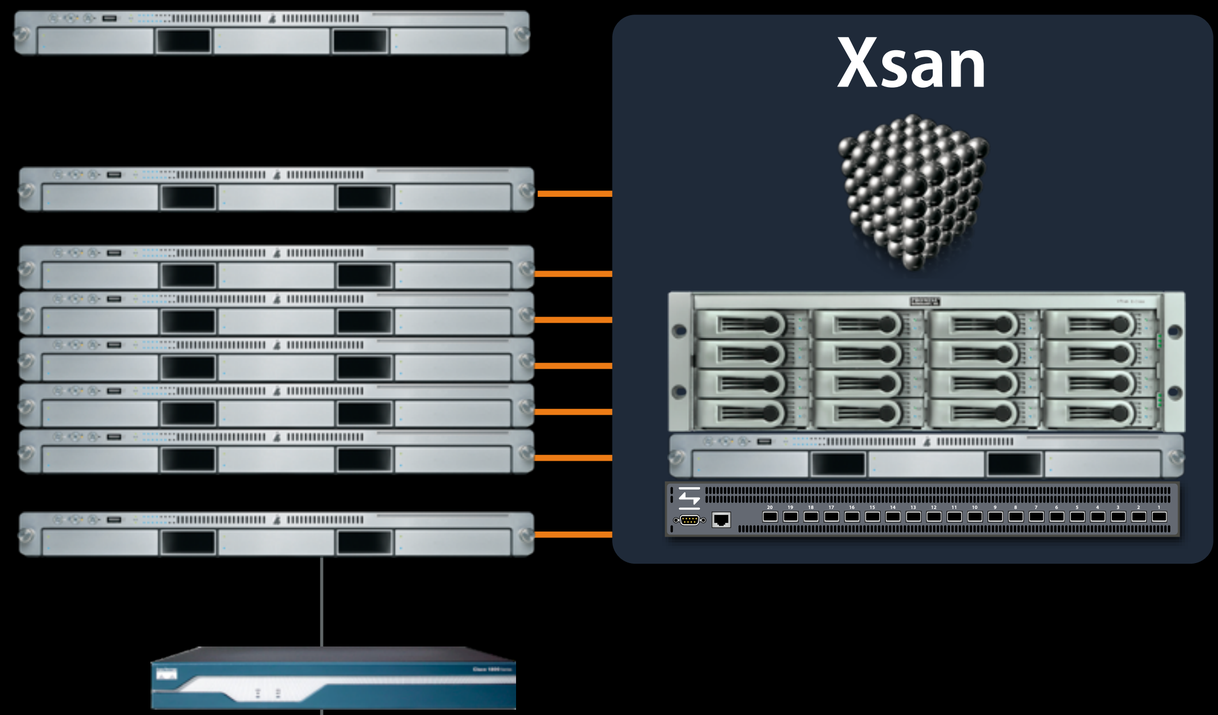
North Carolina State

Open Directory Master

Podcast Producer

Xgrid

Podcast Producer Dev



29 Classrooms

Deployment Checklist

Factors to consider

- How much content?
- What about branding and effects?
- How many versions will be encoded?

Deployment Checklist

Factors to consider

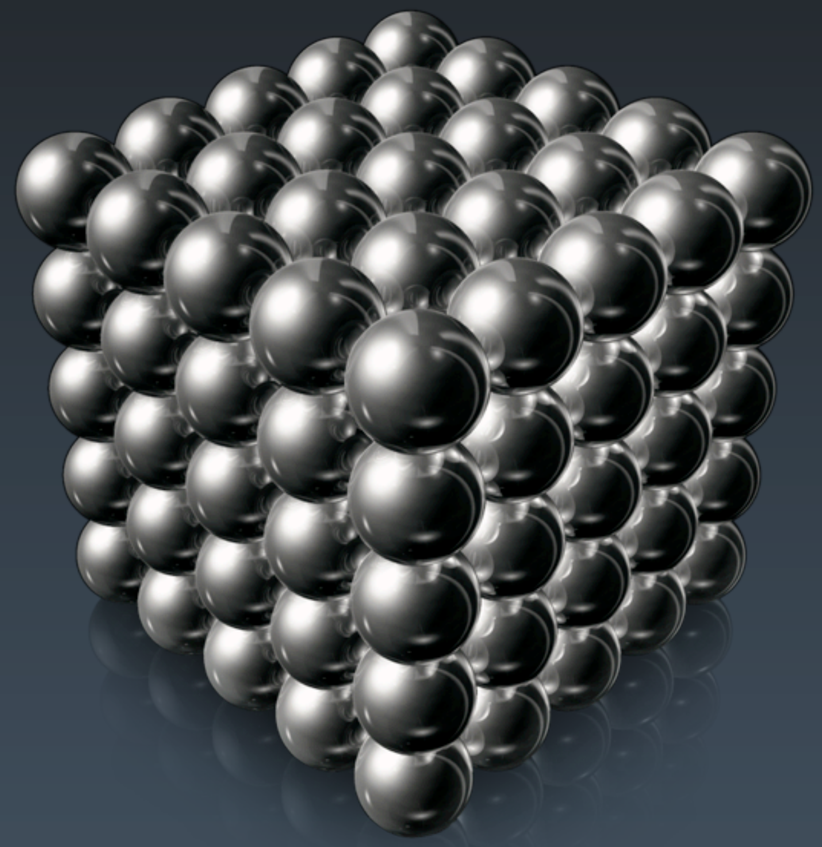
- How much content?
- What about branding and effects?
- How many versions will be encoded?
- How will content be captured?
- Where will it be submitted from?
- What is the size of the audience?
- Where is the audience?

keep

Plan Ahea

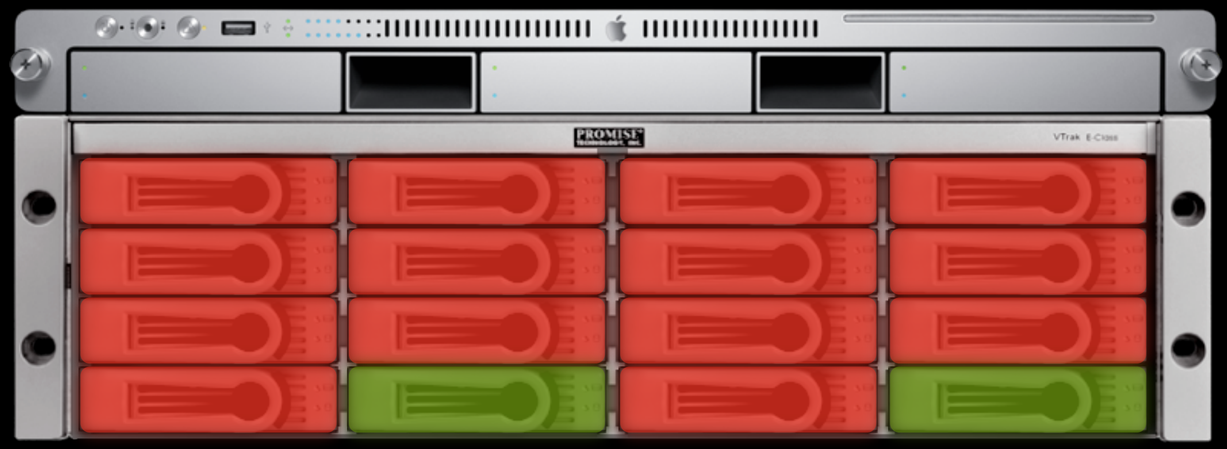
Plan Ahead

Shared File System



Shared File System Choices

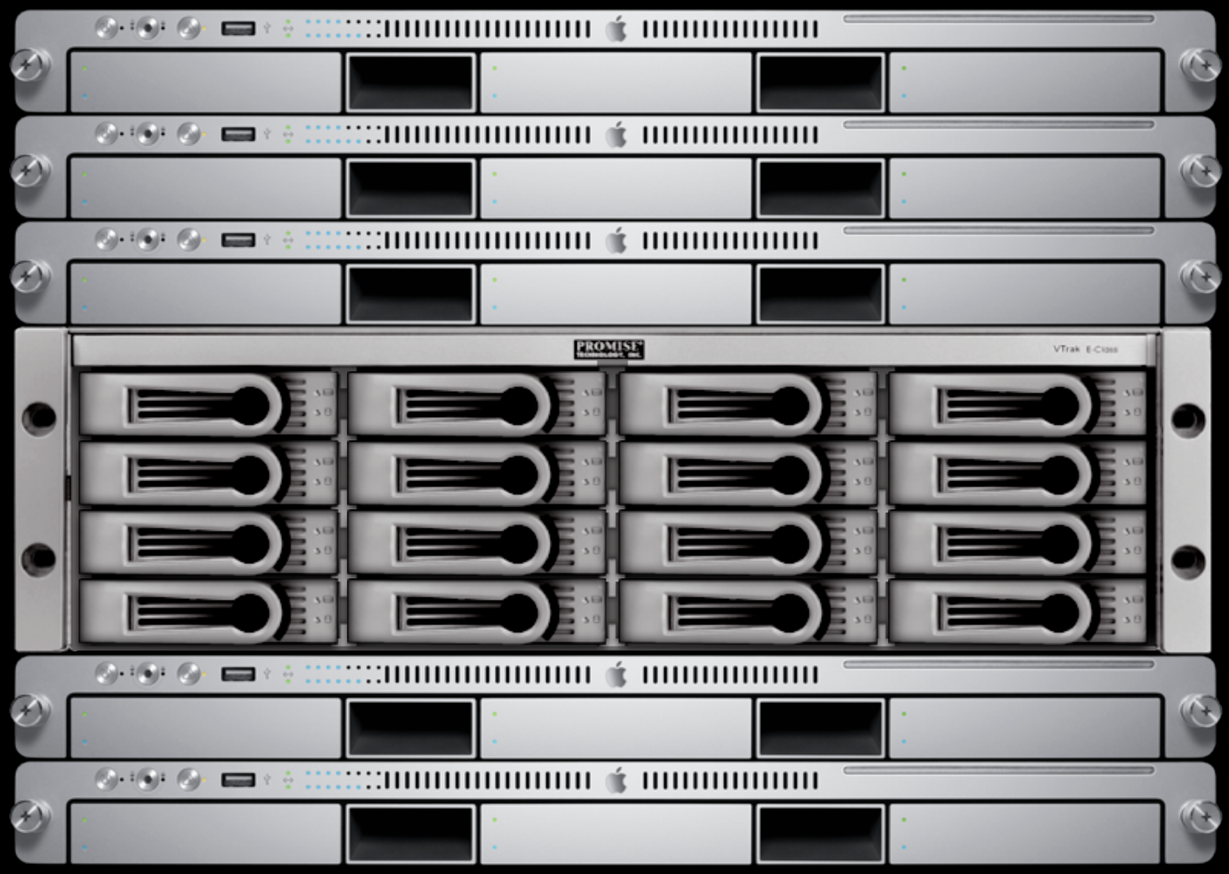
- All-in-one



http://support.apple.com/kb/HT3195

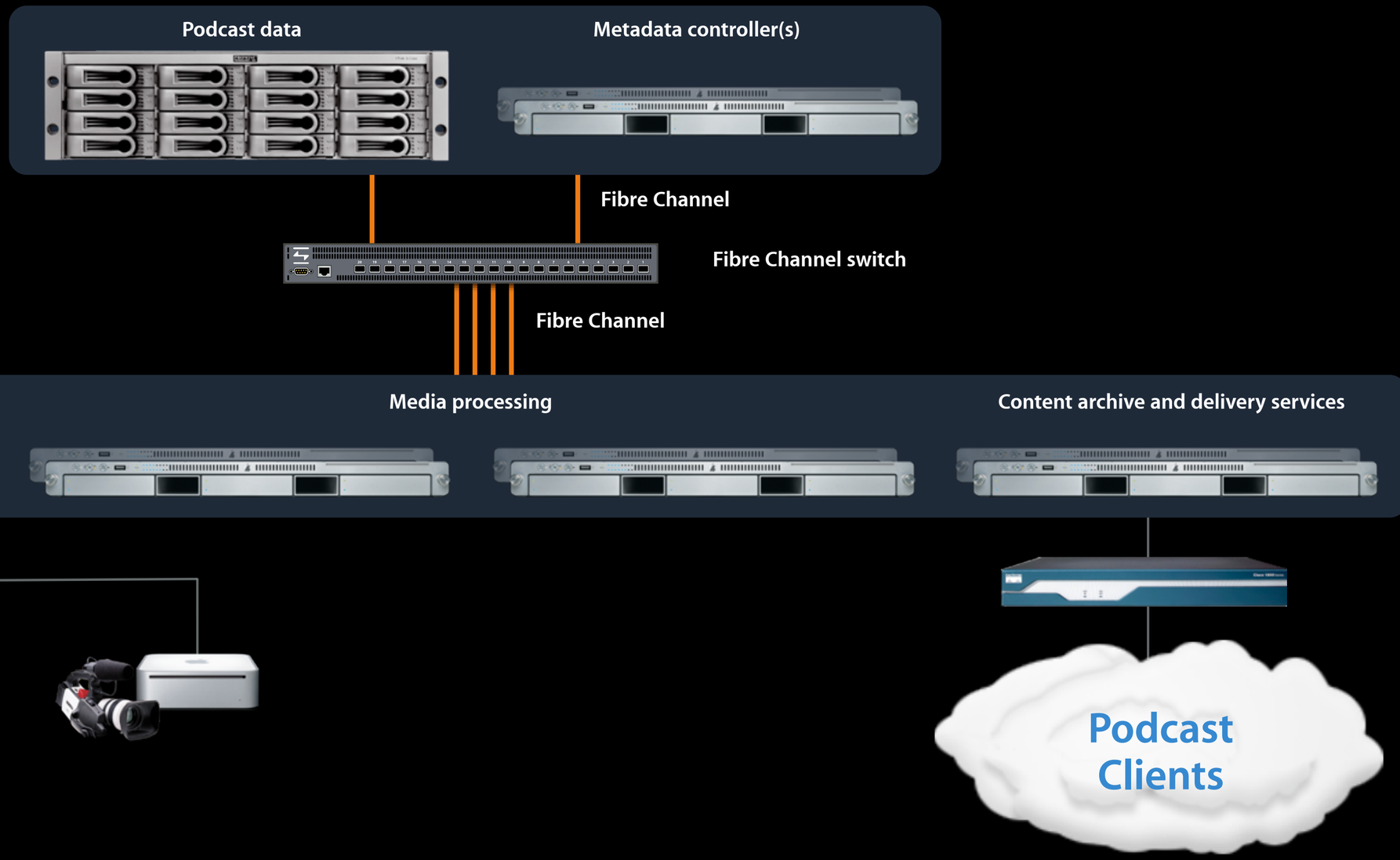
Shared File System Choices

- All-in-one
- NFS



Shared File System Choices

- All-in-one
- NFS
- Xsan



	All-in-One	NFS	Xsan
Single Server Configuration	✓		
Express Setup	✓	✓	
Uses Simple DAS Setup	✓	✓	
Scalable Xgrid		✓	✓

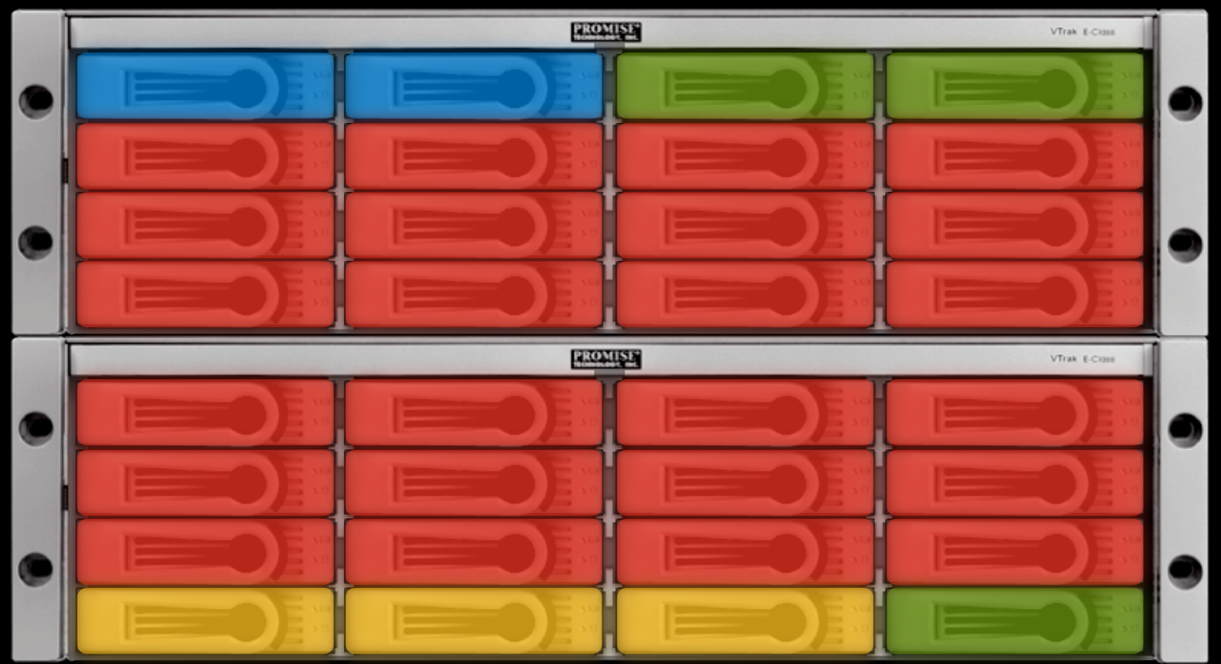
	All-in-One	NFS	Xsan
High Availability			✓
Storage Pools and Affinities			✓
Growable File System			✓
Video Workgroups			✓

Podcast Producer Xsan Configuration

Provisioning storage

E Class

J Class



http://support.apple.com/kb/HT1160
http://support.apple.com/kb/HT1121

Shared File System

Scale to your requirements

- All-in-one
- NFS
- Xsan

Xgrid Deployment

Workflow Complexity

Primary factor for media processing deployment

Information 1 of 7

Provide workflow information.

Workflow Name: Dual Source Biology Lecture

Author: George Cook

Description: Dual source for use in undergraduate Biology lectures

Import 2 of 7

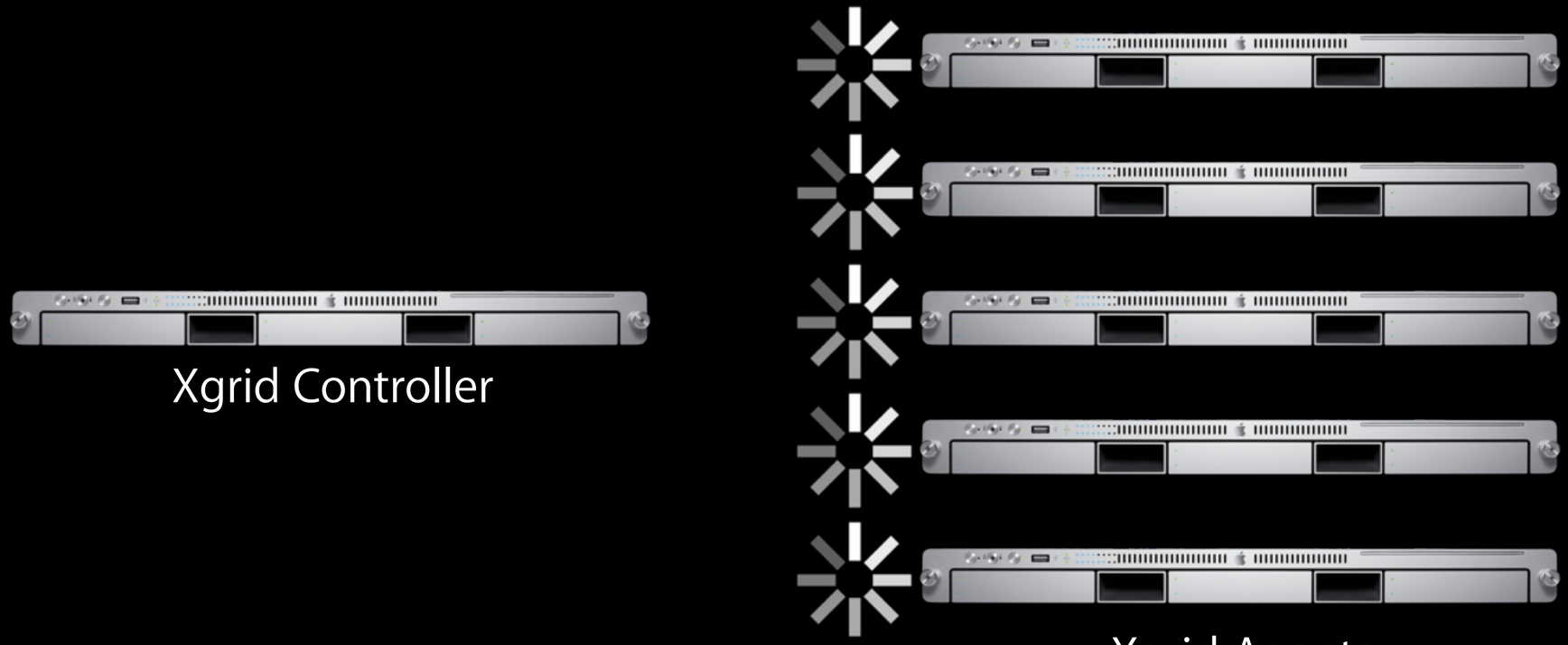
Specify the input source type for this workflow.

Xgrid and Media Processing

Processor allocation on multiple nodes

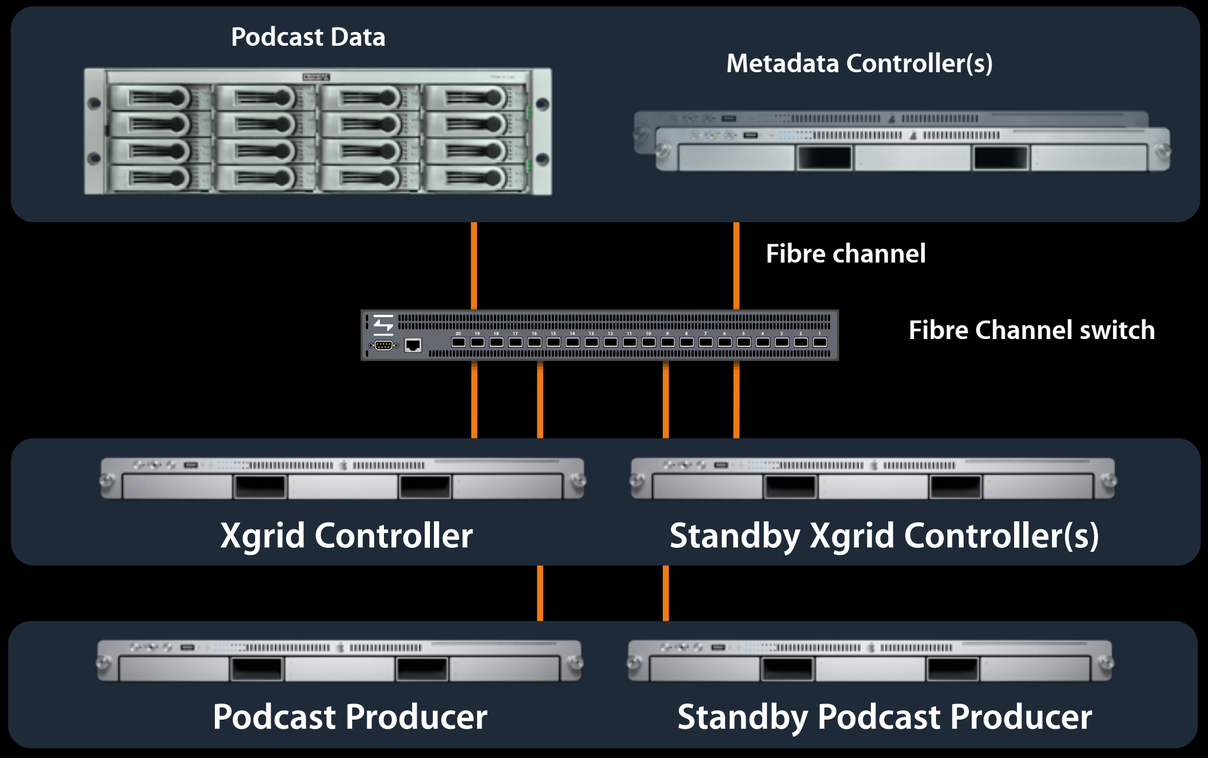
New

- Round robin allocation
- Fastest CPUs selected first



Xgrid and Media Processing

High availability with Xsan



Xgrid Benchmarking

Scale to meet your processing needs

- Typical workflows and content submission
- Test for peak load
- Monitor disk, CPU, and network utilization
- Collect and analyze test data
- In production, continue to monitor performance data

Processing Nodes

Deployment factors to consider

- RAM considerations
- NFS ≤ 8 nodes
- Xsan for scalability, high availability, and performance
  - Integration with compressor clusters and professional video workflows

Media Processing and Encoding

Scale to your requirements

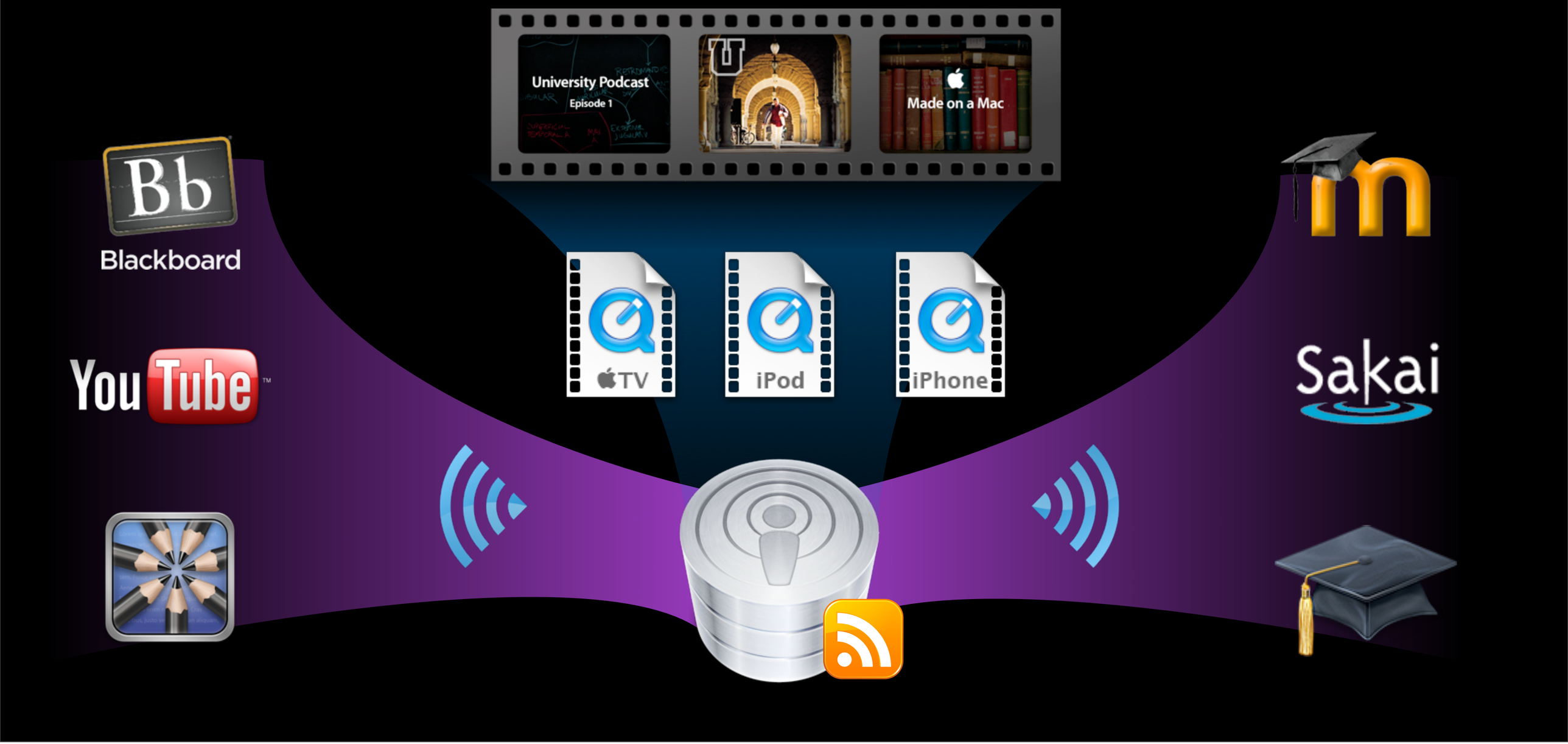
- Workflow complexity
- Round robin task distribution, fastest CPUs first
- Best shared file system architecture
- Consider deploying a development/test server

Podcast Library

Kjell Bronder and Eric Circlaeys
Podcast Producer Engineering

Podcast Library

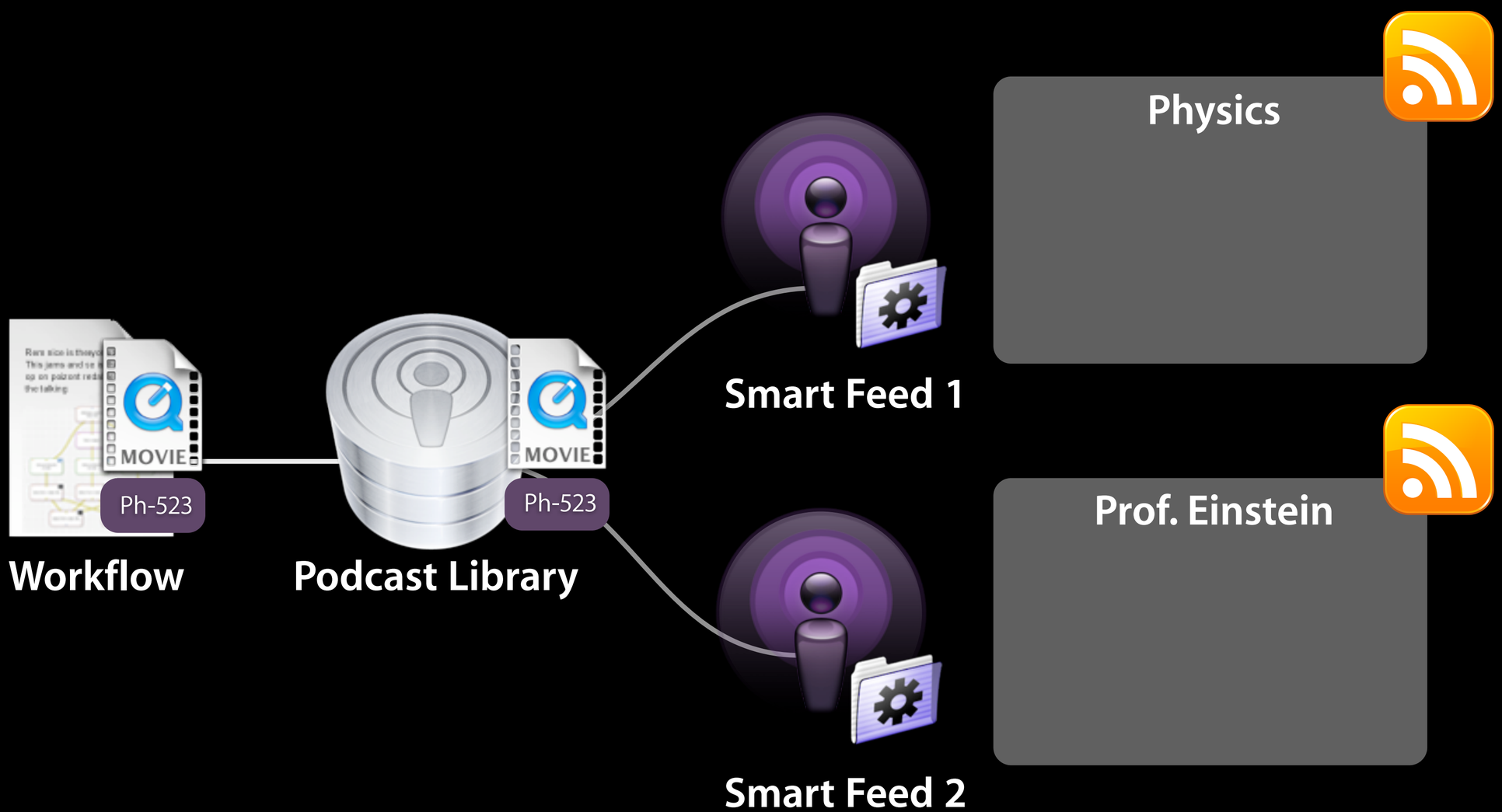
New simplified publishing model



Podcast Library

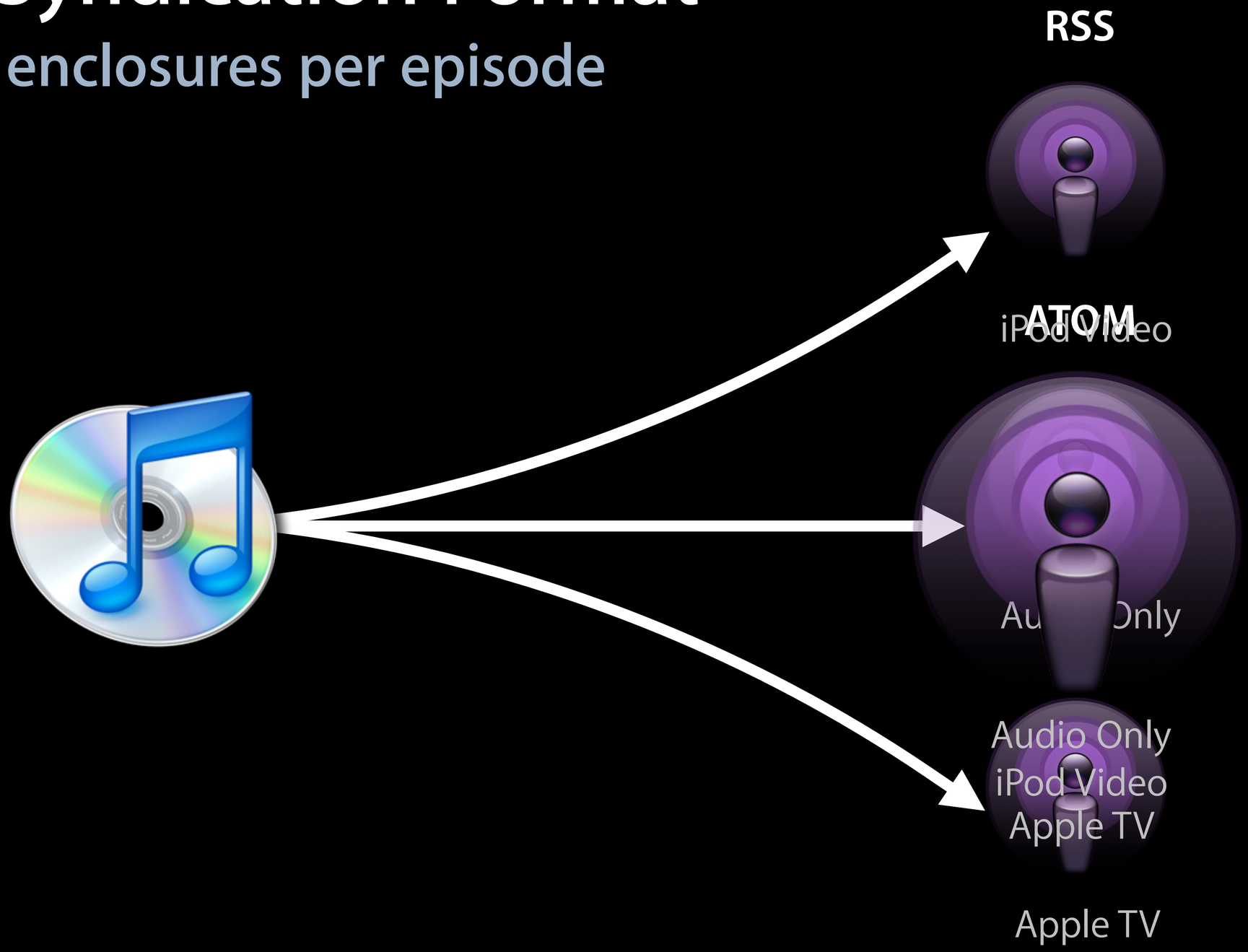
- Centralized repository
  - Content and metadata
- Smart feeds
  - Leveraging metadata
- Industry standards (RSS and Atom)
- Integration with external services
- Simplified management
- Customizable
- Access control using Open Directory

Podcast Library in Action



Atom Syndication Format

Multiple enclosures per episode



Demo

Browsing the Library

Feed Integration

- Leverages standards (Atom, RSS)
- Works with aggregators and web applications
- Tailored Podcast Library aggregators and viewers
  - Applications
  - Web-based
- Existing services can leverage the Podcast Library for ingestion

iTunes U

Customizing Feeds

- Creating your own feeds
  - User feed
  - Keyword feed
  - Custom feed

- Podcast CLI is your friend

```
podcast  --addfeed
 --keyword-name "WWDC09"
 --description "WWDC09 related episodes"
 --query "episode.title LIKE '%wwdc09%'"
```

Customizing Feeds

- Querying episodes' metadata
- Available fields

title	summary
author_shortname	keywords
author_fullname	explicit
author_email	updated_at
workflow_uuid	enabled
created_at	

Demo

Creating a custom feed

Controlling Access to the Library

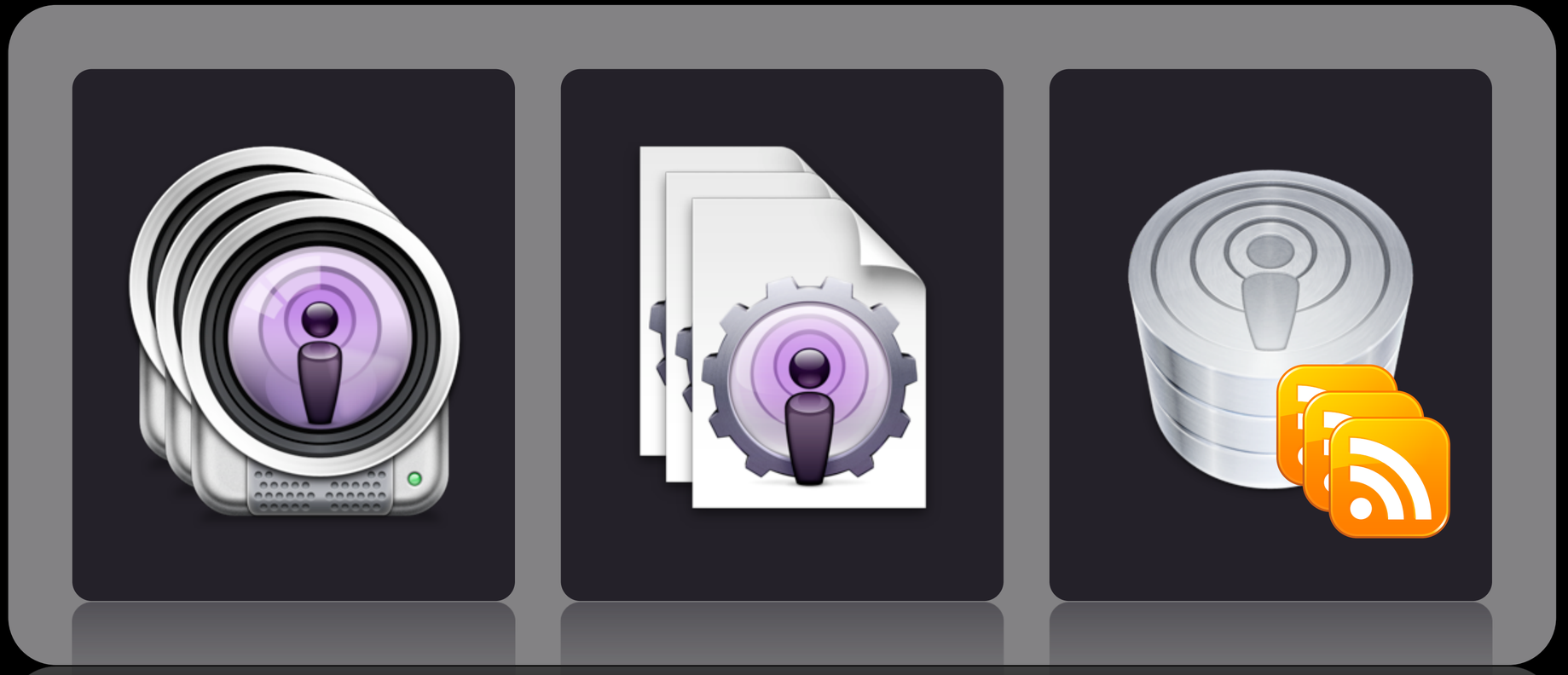
- Open Directory
- Authenticated access to the Podcast Library
  - Supports Kerberos, Digest, and basic authentication
- Three modes of access contol
  - World access
  - Authenticated access (SACL)
  - Lock down
    - Explicit permission
- Administrators always have full access

Controlling Access to the Library

Different levels of granularity

Controlling Access to the Library

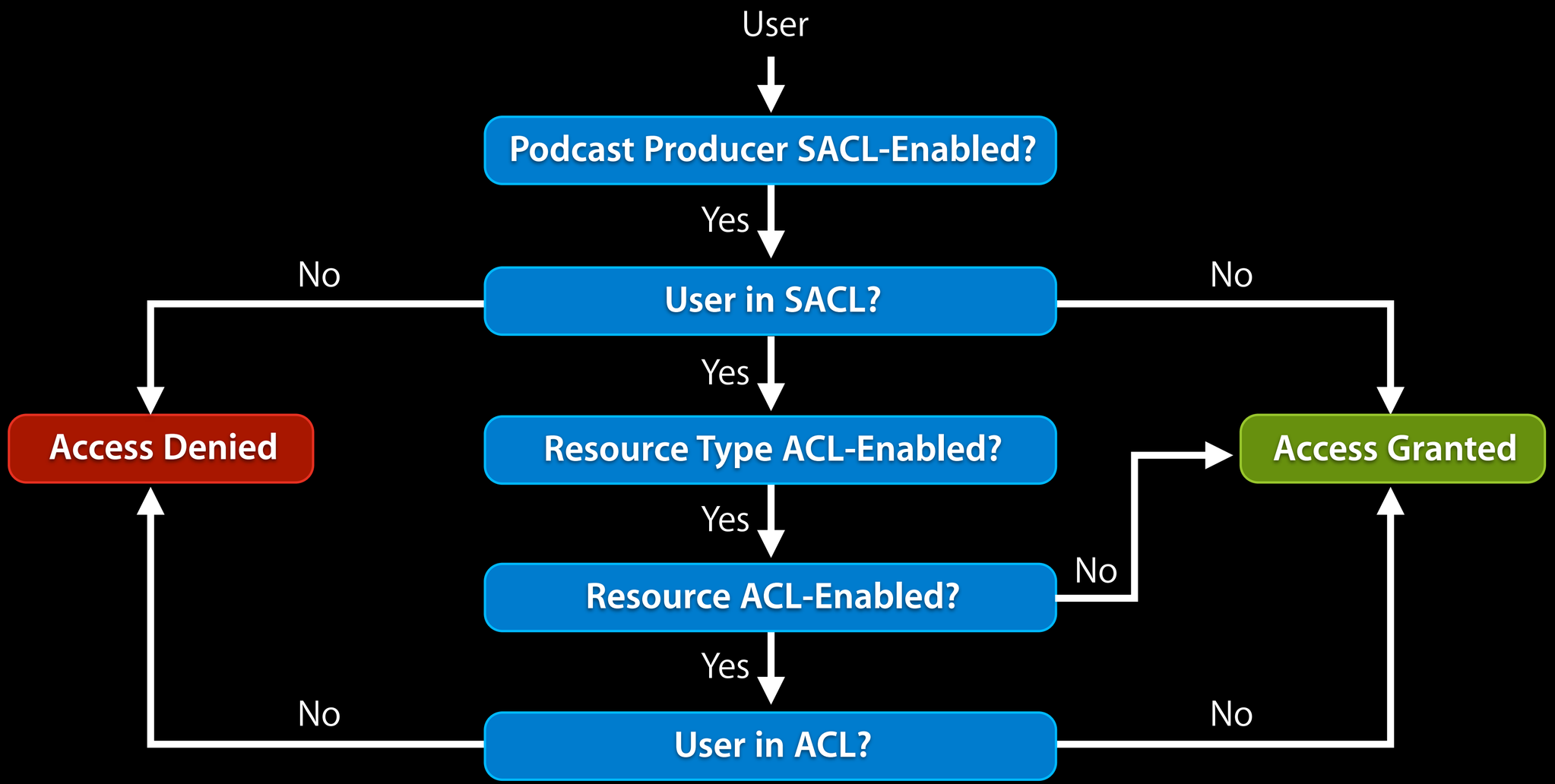
Different levels of granularity



Controlling Access to the Library

Different levels of granularity

Controlling Access to the Library



Demo

Controlling access to the Library

Summation

- Plan ahead!
  - Checklist
- Determine the infrastructure you will need
  - File system
  - Xgrid size
- Podcast Library
  - New standards-based publishing model
  - Fully customizable and easy to integrate into external solutions
  - Granular access controls

Related Sessions

What's New for Podcast Producer 2	Russian Hill Tuesday 3:30PM
Podcast Composer In-Depth	Nob Hill Wednesday 5:00PM
Quartz Composer Advances in Snow Leopard	Marina Wednesday 5:00PM
Xsan Configuration, Optimization, and Integration Best Practices	Nob Hill Friday 10:00AM
Mac OS X Server State of the Union	Pacific Heights Monday 5:00PM
Performance Tuning for Mac OS X Server	Mission Thursday 2:00PM

Podcast Producer Labs	Information Technologies Lab Friday 12:00PM

Deployment Support Resources

- **Provisioning Promise Storage**
  - http://support.apple.com/kb/HT3195
  - http://support.apple.com/kb/HT1160
  - http://support.apple.com/kb/HT1121
- **Promise configuration for optimal performance**
  - http://support.apple.com/kb/HT1200
- **Podcast Producer system requirements (10.5)**
  - http://support.apple.com/kb/HT2800
- **Authentication methods for Podcast Producer**
  - http://support.apple.com/kb/HT3289
- **Podcast Producer and Active Directory**
  - http://support.apple.com/kb/TA25011

Q&A

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WWDC09